

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1-20. (canceled)

21. (currently amended) A method of using at least one filter to receive signals from an antenna by changing filtering characteristics, said method comprising:

changing filtering characteristics on a main signal path as a function of at least one amplitude on another signal path (18) coupled to the main signal path and a power level on the main signal path where the main signal path and the other signal path have a frequency band of operation and where said amplitude is an adjacent band relative to the frequency band of operation;

receiving analog signals on said main signal path;

producing a replica of said analog signals on the other signal path where the other signal path is a band edge detection path;

dividing said analog signals on said band edge detection path onto an upper edge detection path and a lower edge detection path; and

producing an upper edge amplitude for said analog signals at an upper edge relative to said frequency band of operation on said upper edge detection path and a lower edge amplitude for said analog signals at a lower edge relative to said frequency band of operation on said lower edge detection path; and

detecting a power level of the signal on the main signal path.

22-24. (canceled)

25. (previously presented) A band edge amplitude reduction system for a receiver comprising:

a variable filter on a main signal path having a frequency band of operation;

processing circuitry for changing filtering characteristics of said variable filter as a function of at least one amplitude for a frequency band adjacent to the frequency band of operation or as a function of signals not under the control of said receiver and as a function of at least one amplitude for the frequency band of operation;

a band edge detection path for receiving a replica of analog signals on said main signal path;

a signal divider for dividing said analog signals on said band edge detection path

onto an upper edge detection path and a lower edge detection path; and

detection circuitry for receiving said signals on said upper edge detection path and said lower edge detection path and produces to said processing circuitry an upper edge amplitude for said analog signals at an upper edge relative to said frequency band of operation and a lower edge amplitude for said analog signals at a lower edge relative to said frequency band of operation.

26. (New) A method of reducing interference in a wireless communication system, the method comprising:

receiving radio frequency analog signals in an operating frequency band on a main signal path of a receiver;

filtering the received analog signals via a variable filter;

sending the filtered analog signals to an analog power level indicator;

determining the power level of the operating frequency band via the analog power level indicator;

sending a replica of the received radio frequency analog signals in the operating frequency band to band edge detection circuitry;

splitting the replica of the received radio frequency analog signals and providing a replica on each of an upper band edge detection path and a lower band edge detection path;

measuring at least one amplitude for an adjacent frequency band, where the adjacent frequency band is not under the control of the receiver;

comparing the amplitude for the adjacent frequency band to the power level of the operating frequency band; and

adjusting the variable filter as a function of the comparison made between the amplitude for the adjacent frequency band to the power level of the operating frequency band.

27. (New) A method of reducing interference in a wireless communication system, the method comprising:

receiving radio frequency analog signals in an operating frequency band on a main signal path of a receiver;

filtering the received analog signals via a variable filter;

sending the filtered analog signals to an analog to digital converter;

sending the output of the analog to digital converter to a digital power level indicator;

determining the power level of the operating frequency band via digital power level indicator;

sending a replica of the received radio frequency analog signals in the operating frequency band to band edge detection circuitry;

splitting the replica of the received radio frequency analog signals and providing a replica on each of an upper band edge detection path and a lower band edge detection path;

measuring at least one amplitude for an adjacent frequency band, where the adjacent frequency band is not under the control of the receiver;

comparing the amplitude for the adjacent frequency band to the power level of the operating frequency band; and

adjusting the variable filter as a function of the comparison made between the amplitude for the adjacent frequency band to the power level of the operating frequency band.